

FIG. 1

10 30 50
GTGAAGAACGAAAAACCTTCTTTGAAGAGCTTTACGAGGCTTTAGAGGAAACCCACGAC
M K N E K T F F E E L Y E A L E E T H D
70 90 110
AACACCGATGCCACTAGGGGGTCAGATAGGGGGTCAGAGGACTTCTTCTTGGCCACCGAC
N T D A T R G S D R G S E D F F L A T D
130 150 170
CCCCCTCCAGATGGAGGTGCCGAAAATCGCCTCGGAAGGGCTTTACATACCAAAAAGAG
P P P D G G A E N R L A K G F T Y Q K E
190 210 230
GCACTTAGGATTGCTTTACCCGAGAAAGACCATGAGGCTTTCCTTTCCTGTTGGGGCC
A L R I A L P E K D H E A F L S S V G A
250 270 290
CCCCCTATACCACAGCTGAACCCCCGTTGGGAATGTATGTCAAGCCGTCCAGGACGGG
P P I P P A E P P V G N V C Q A V Q D G
310 330 350
CCTCAGAAGCTTCTGGAACCTCCTCCAGGAGATTGCCCGCTCCACCATCCCCTACGGCAAC
P Q K L L E L L Q E I A R S T I P Y G N
370 390 410
CGGGAGCTCTGGAGGAAGGTGGGGACGGTCGTCTTCATGGTCCCCCTGGAGATGTTGGCC
R E L W R K V G T V V F M V P L E M L A
430 450 470
CTCAACCTGGGGGTACCCGGCAGACCGTCCACGCTGGAAGAAGGTCTTGAGAAAAAG
L N L G V T R Q T V H A W K K V L E K K
490 510 530
GGCCTGGTGGCCACCGACGTCTTCACCAAACCGTCAACGGGGAGCGCGGGGCATCGGC
G L V A T D V L H Q T V N G E R R A I G
550 570 590
ACCTTTGGGCGTCCGGCTGAGGCCAGGGAAAGCCAGGCTCACCTGGACGACTACATC
T L W A V R L R P G K A R L T L D D Y I
610 630 650
TACCCCTGGAGGAACCTCGCCCTAGACATGGCCAACGGCGTGTCTCTTCAACTGGGTC
Y P W R N L A L D M A N G V L S F N W V
670 690 710
AAGGCCTACCAGGACCACGAATCCGCCCCACCCTGGACGTGCTGCTCTCTGGGCTCAG
K A Y Q D H G I R P T L D V L V L W A Q
730 750 770
GGGAAAAGGGTGATGCCAACACCAAGACCGTGGCCGTTGACCTGGGCCTCATCCTGGTC
G K R V M P N T K T V A V D L G L I L V
790 810 830
CTCCCCGAGGTGGAGCGTTCCAAACTCCCGGCCCTTATCACCTCATTGCTACGTACATT
L P E V E R S K L P A L I T L I A T Y I
850 870 890
GCCGATCTCCTAGATGACCGTCGTTCAAGACGTTTCTATGCAGGCTTGCTGTGGGCTGTG
A D L L D D R R S R R F Y A G L L W A V
910 930 950
GCCAGGGGTGAACCTCCCGCGCAATATCTATTTGCCGTCCTAATGCGGGTTATCCGAGAT
A R G E L P A Q Y L F A V L M R V I R D
970 990 1010
TACACGGATGGCCATCTGACACGACCGGGAGCGTACCTAGTGAAGACCCTCAAGGAGGCC
Y T D G H L T R P G A Y L V K T L K E A

TCCTGA
S *



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FIG. 2

1 CTATAACGGCCTTTTAGGAGGGGGGATTGCCAGCCGCTGGGCTGACGGTTATTTGGACC
61 CATAAAAGGCGAAACCGAGGCGGTTGCCCGGATCACCCCAAGACCTAGGGTAACGCC
121 TCGGGCTCCAGATGACAAGGAGGTCCGAGGGTGAAGAACGAAAAACCTTCTTTGAAGAG
M K N E K T F F...(RepT)



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FIG. 3A

1 tctagaaggt caggggtggac aaggaaaaaca ccatagcccc tgccaagaag atggacgagt
61 tgggtgtccgg aaaagtggcc atccggggcg ctcttgacaa ctattttcca gcggtggcca
121 ccggcattgg ccacgaggta cgaagcttgg gagtagacgg ccacaaaggg gtcgtcccca
181 aacttctttt ctagtgccgc ttggacgaag gggaggaaga ggaaaggctt catggcccca
241 cctccttccc ctctccttg gcggccttag cggcgtaaaa ctctgagacg gcctgaagtt
301 tagggatttc gctttcgggg ataagaatcc ggcggtcag gggatgccgg atggccctta
361 tccgtccgtc ccttatgtac tcgtaaatgg tggccttggg tactttaaac cgttctgaaa
421 ctctctaac agagagcaca aaacctctaa aaacctatca atccccaccga ticcagtata
481 ccataaatgg cacaaagttt tgagaaggtg gtcaaacaaa aaggctttct cggtcagggt
541 atggtgaggt gggggcggtc aaaggccgac ttaagtttgg taaagccggg aggaagcaaa
601 ccgggggtgt accatgcaac agatggccga gtggaacgtg tggacacaga gaagcgttga
661 gcttctggag aaggggtatt tgataaaact actgcaggtc tataaagggg aaagtggctc
721 ttcgaggta gtaccagagg aggtagagga aaaacttcgc gaggcctaca aggcatacga
781 ggggaggcag gatagtccgg aggcagaaac gaaactcgtg gaagccgtgc taaatgccag
841 aaaaaaggtc gagcgggtccc ccttcaatca cccctacctg cctttgggtc actacctgtt
901 ttcgaaaaaa gcagaaaaag cgaacaaggc ccttgaggag gcattgcagg aggttgccctc
961 aaagcaccca gaaaccatcc gcgtcctggc caaggaagcg caaagaagag gcgtagaagc
1021 ctgatccaa aggtcgaagg agcctcccga aataaatcgg cagatagggc cgatgttcaa
1081 aaggtgttac aaagaagagc taaaggggaa aatagaagag aggttccag gccctacca
1141 accaaagatt gtggtagtat cccctgaaaa aagtaaaccg gagcaagcac ccttattgc
1201 ggagagagaa gcgggcatca tcatatacac gggatcggat gaagcttga aagatgccgc
1261 caaggaaaac ctgggccttg gcgaggaagc agaactaggc accaaggcg tagatttcta
1321 cgtggtcatc cggcgtagcc ctgaagagac atggcaccta acaggagaag tgaagttca
1381 atccgacttt ggcggaacc aagacaacca gaaactagta gcaaaggctt ccataagggt
1441 ggaccttgag aagaggcaca taggaatagt ggtggtggac ggaatgccgt tggtagcaaa
1501 gtttcgtggg tgggccggac tgggaaaga aacgatcgtt acatccgtac tctccttcc
1561 agacctgata gcggagctct accaaaaggg tgaagaagcc ctgggcctct agaaggcgga
1621 cacaatctca aacttgtgct gtaccctggg gaaatccct aacaccctc tagtgaaggc
1681 tttgaccgcc tcccaggagg catctatgcc gatggatcgc cgctttaaga ggggtgaggc
1741 tataagcgtg gtaccggagc ctgcgaagg atcgagcact aaatccccct cgttactccc
1801 tgtttggacg atgagcttga gcatgtccag atttttctcg gtgggtatc gcgggtacgg
1861 aggatccttg aactgccaaa cgtcctggag ctcttcccc ttcttcaggc gatcccagc
1921 gtaaaccttc ttcccgggca cccgcttct tgaccagaca ataagccctt gagcgtctag
1981 ctctgcaagc ttctccgggg gatagcgcca atgccgtcca ggagggggaa gtattcctcg
2041 ccaaggcctt ccggtagggc catccttggg ttctccagga gcatgcagg gatgtgtgt
2101 gtaccgttcc ccgttctct ctacaaagg gaaaagccta gcgatctct ctccgaata
2161 ggggctagcc gattcgttct aaacgtagtc ccgcgtttg gagtagaca ggaatcatgc
2221 cttttgcgat ccgaaggcct tacgggaaaa gtitttggga ttigaagcga tgcgggcgat
2281 atgggtaacg aagtttcgac ggccaaagac ctcatcaagg atgagcttca cctcgaacc
2341 gtatttctcg tctatgtgaa cgaagatcag tcctgagtc gccatcagct cctgagaag
2401 tatcaagcgc tccctcagga actccacaaa ctgaggacca tggagggtgt catcgtagcc
2461 caactgaccg tttttgggct ggctgacggt agcaacgcga tctgtttcat cgccgccaac
2521 gagaaactgc tggccgggtc cataaggcgg gtcaaatatg accaactgga ccttccccgc
2581 ataccacca ggctcccga gcatccaccg gagaacctga ccgttttccc ccaaaaagta
2641 ggtgccaata ggatcaatct caaaaagggg ggcatttccc cctaggaaga ggagggttc
2701 ttttcgcaaa acaagtgtg ggggtggctg atcaagaatc tccttctcat cgcgttttc
2761 ggggtagacc aacctaaagg gcgaagggtc cgagggtttc gaggtttca agggggctt
2821 tccgggtcaaa ccagggtagc tacggctcat tcttccctcc ccacagcgt cttagcagg
2881 acctatcac ccacaacct cagcactcc aaccaaggaa tccgccaag gcggcctacc
2941 ttttgagccc gtatcttccc ctgacgtata gaccttcgga tctgtcagg gtgcaccga
3001 aggatgtctg caagctctc gggggtcagg tacacgggct tcatctcat gacacaacct
3061 taccacacag aggaacaac atgcaactat gggcaaaagta gacaacgaga ccaaaagctt
3121 gggccactct ctgaggaggc ctctttagg gtcttacta ggtacgtcc cgtcgtgtc
3181 agatggccat ccgtgtaatc tcggataacc cgcattagga cggcaaatag atattgcgcg
3241 gggagtacac ccttggccac agcccacagc aagcctgcat agaacgtct tgaacgacgg
3301 tcatctagga gatcggcaat gtacgtagca atgagggtga taaggggcgg gagtttgaa



FIG. 3B

3361	cgctccacct	cggggaggac	caggatgagg	cccagggtcaa	cggccacggt	cttgggtgtg
3421	ggcatcacc	ttttcccctg	agcccagagg	accagcacgt	ccaggggtggg	gcggattccg
3481	tggctcctgg	aggccttgac	ccagttgaag	gagagcacgc	cggtggccat	gtctagggcg
3541	aggttcctcc	aggggtagat	gtagtcgtcc	aggggtagcc	tggctttccc	tggcctcagc
3601	cggacggccc	aaaggggtgcc	gatggcccgg	cgcctcccgt	tgacggtttg	gtgaaggacg
3661	tcggtggcca	ccaggccctt	tttctcaagg	accttcttcc	aggcgtggac	ggctctgccg
3721	gtgaccccca	ggttgagggc	caacatctcc	agggggacca	tgaagacgac	cgtccccacc
3781	ttcctccaga	gctcccgggt	gccgtagggg	atgggtggagc	gggcaatctc	ctggaggagt
3841	tccagaagct	tctgaggccc	gtcctggacg	gcttgacata	cattcccaac	ggggggttca
3901	gctggttgta	tagggggggc	cccaacagag	gaaaggaaaag	cctcatggtc	tttctcgggt
3961	aaagcaatcc	taagtgcctc	tttttggtat	gtaaagccct	tcgagggcg	attttcggca
4021	cctccatctg	gaggggggtc	ggtggccaag	aagaagtcct	ctgacccctt	atctgacccc
4081	ctagtggcat	cgggtgtgtc	gtgggtttcc	tctaaagcct	cgtaaagctc	ttcaaaagag
4141	gttttttctg	tcttcaccct	cggacctcct	tgctatctgg	agcccagagg	gttacccctag
4201	gtcttggggg	tgatccgggg	caaccgcctc	ggtttcgcct	ttttatgggt	ccaaaataac
4261	cgtcagccca	gcggctggca	atccccctc	ctaaaaggcc	gttataggcc	ctgctaggag
4321	gggggtagta	ctttcctacc	cccctaggct	tggagaggcc	ttaggaggtc	tcctaggggc
4381	tcgtgggggt	gtaggggtaa	cctcatggcc	aggccggccg	gctcgggact	ctggaggagg
4441	cctccatagc	ctactcgtgg	tggaggtttg	tgaaggggtt	cactaatgca	tacggctagc
4501	ctcgggatca	cggccaaatg	gtatgcaggt	tttgggtataa	aaccctcagg	tttgaggcta
4561	gtttatgtcg	gttttatgca	cctttgactc	ggatcacggg	cataaacacc	agtttcttgc
4621	acgaaagaaa	actttcgcga	tctaagaggg	ggaaagaggt	gtagaggggac	ggccttcatg
4681	aaagttaggg	tcttaggagg	ccgttgtaga	gggccgtctc	gggttcaaat	cctttccctc
4741	ttcttccagg	tttccgaggt	tcgaggtctt	ggtccaggtc	ttgtaccaag	tttttgacca
4801	aagtctattc	tcggaatata	ggggatcttt	gtctatcttc	cctacgggat	atctctgtct
4861	gtgtgaactt	gatcccatcc	caatacatat	ctcaatctcc	taatctctc	ttctctccag
4921	atccctaate	tcttcttcta	cctctttctc	ctcccaatta	agaatggaga	ggaaaaaccc
4981	cgaccagaac	gagcttctcg	gggtcagttt	cggtaatctc	gggacagggt	ttcatcgtct
5041	aggacgagga	ttagggcatg	aaaaatgggc	tttgacaaaa	tctttctaaa	aaatactccc
5101	cgagggttgg	gaagtgcctt	cggggagaag	atttttggca	gttttagatgt	tatgtcttat
5161	cacgggccgg	aggcctccac	gataagtgtg	cttgggccaag	taccggggcca	ggtcgggggt
5221	gctcttcagc	gtggtgatgg	tactttcacg	gaagttcaca	agtcttttta	gaggcttcag
5281	gtcggggata	gtgctcaagt	actcccaagc	gttctcgggc	ccgtgggtcgg	ggagaaggac
5341	aaaggggtcg	ggcaaaagt	catctttgta	cttaggacgg	attacttttag	cacctgataa
5401	cttcaggggc	gttaagaagg	gcctcacctc	ggagacgggt	ggaaggagga	cgtgggcgtg
5461	gaagaagacg	aaccccgaat	tttgggaagt	ctccctccag	tttgatgatg	aacgttggga
5521	ggaagccggc	caggatgtct	ttcatcgcgc	ctcgaacctc	ggacacataa	aaaactttcg
5581	tgtttgtcag	ggcaagagt	ctatgtatga	ggtaaccttc	gggagtacaa	agtgcctcaa
5641	gccgcctttc	ccaacgctcc	aaaactctag	ggtcaggtgg	tttaggtttt	ctgaaaaact
5701	ctagcttttc	agtggctatt	cctcaccctt	ctagcacgta	ctctggaagg	taaacttttg
5761	acacagcggc	caagtcctagc	gtctcccagt	ccagttggtc	tgggacgcgt	gagaagggga
5821	ggggcttgg	gtagaggacc	agaagaccc			

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FIG. 4

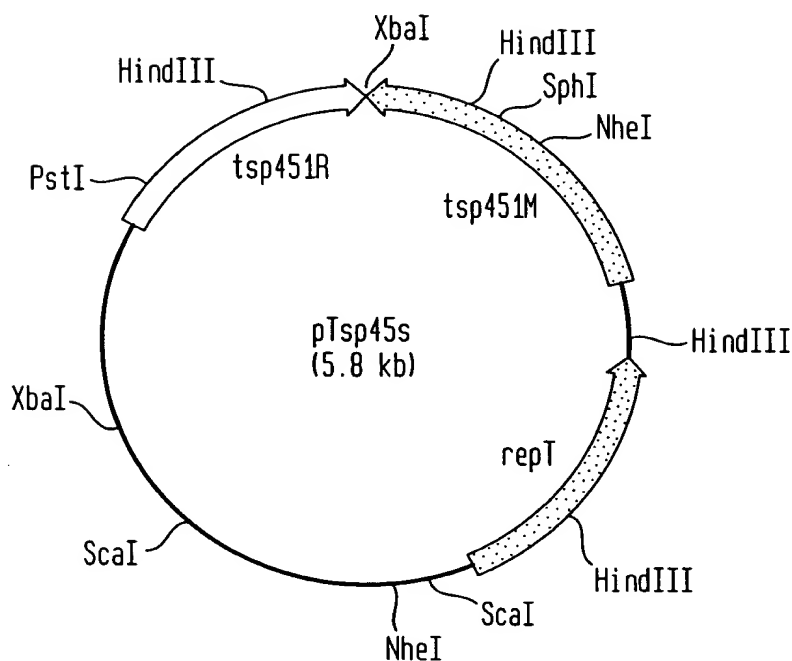


FIG. 5

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1  ATGATCGTGGCTGTACCGGCTTCAAGGGAGGGGTGGGGAAGACCACCACGGCGGTCCAC
   M I V A V T G F K G G V G K T T T A V H
61  CTGGCCTGCTTCTGGCCGAGCGGGGCCCCACCTGCTGGTGGACGGGACCCCAACCGC
   L A C F L A E R G P T L L V D G D P N R
121 TCGCCACGGGGTGGCACC GGAGGGGAGGCCTCCCGGTGACCGTGGTGGACGAGCGGGTG
   S A T G W H R R G G L P V T V V D E R V
181 GCGGCCCGGTACGCCCGGGAGCACGCCACGTGGTCATAGACACCCAGGCCCGCCCCACG
   A A R Y A R E H A H V V I D T Q A R P T
241 GAAGAGGACCTCCGGGCCCTCGCCAAGGGGGTGGACCTGCTGGTCCTGCCACGTCCCCC
   E E D L R A L A K G V D L L V L P T S P
301 GACGCCCTGGCCCTGGAGGCCCTCCTGGCCACCCTGGAAGCCCTGCGGGGGCGGAGGCC
   D A L A L E A L L A T L E A L R G A E A
361 CGCTTCGGGTCTCCTGACCATGGTGGCCCCCGCCCGGAGCCGGGACGGGAGGAGGCC
   R F R V L L T M V P P P P S R D G E E A
421 CGGGCCCTCTTGGGGGCGGAGGGCGTTCCCTCTTACAGGCTGGGTGAGGCGGGCGGCA
   R A L L G A E G V P L F T G W V R R A A
481 GCCTTCCCCAAGGCCGCCCTCCTGGGGGTGCCTGTCTACCGGGTGCCCGACCCAGGGCG
   A F P K A A L L G V P V Y R V P D P R A
541 AGGCTGGCCTGGGGGACTACGCGCGGTGGGGGAAGAGCTCCTGAAGGAGGTGGGGGA
   R L A W G D Y A R V G E E L L K E V G G
601 TGA 603

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FIG. 6

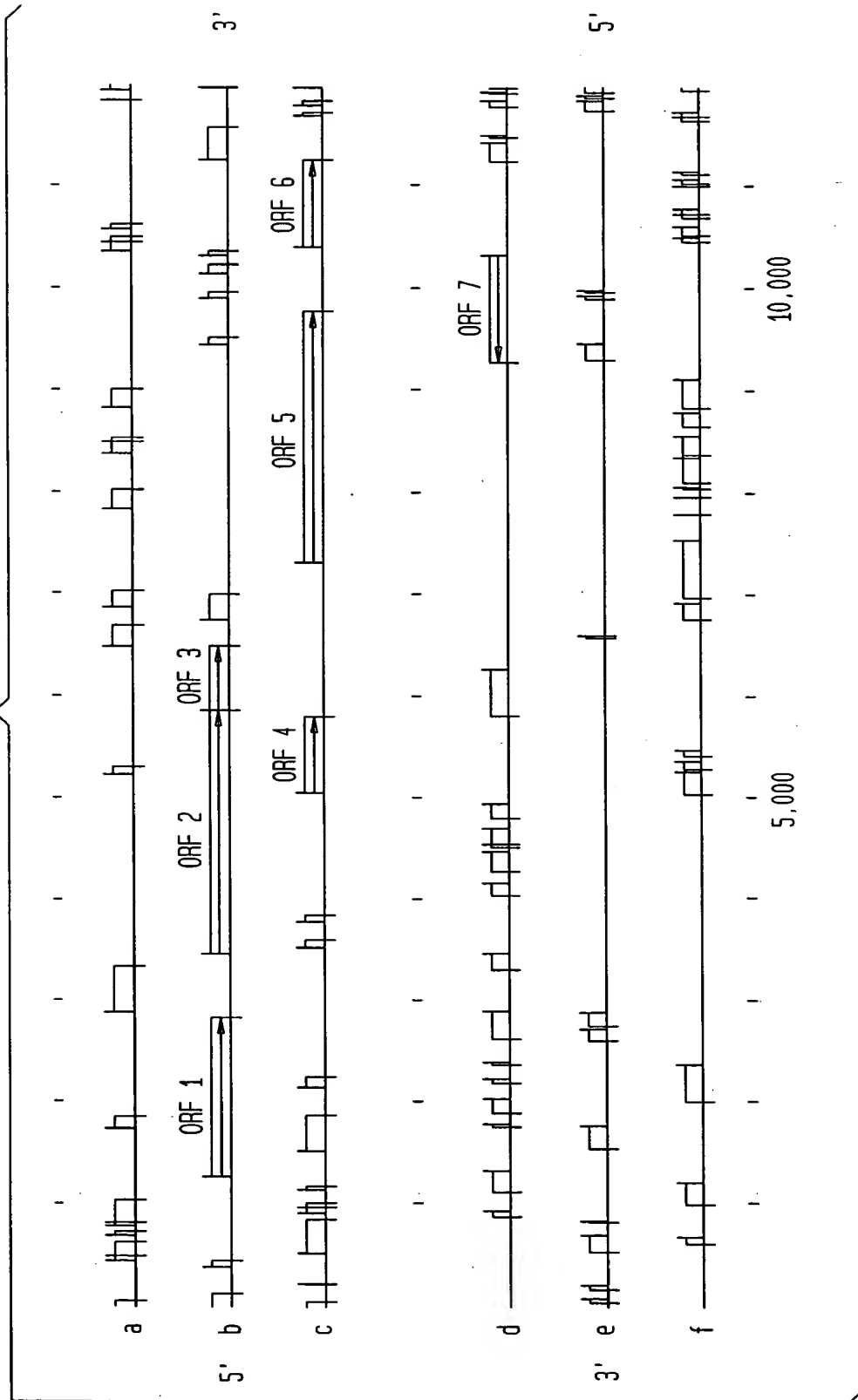




FIG. 7A

CTTATACACAACTATACACGTCTCTATCGGGCTTTTCTTAGCGCCATGTAAACACC 60
CCTCCCATCTCCGGGTGTTTACAGCGGATACGGGAGGTTACGCGGAACCTTTCCCTTG 120
TTGAAACTTTGGGGCTGAGGCTCAACAGCAGAACAGCTTAGGTTGACTCAACACAGCTC 180
ATAAGTCCCTTCATTATCGCCTGAGTCAACCTATGAGTTAACCTTTTTCAAGAAAAGA 240
GATAAGTGAGTTTTGTCTCTAGCACGACTTTTTCTTTGAGTCAACCTCTGTGCCGACC 300
CCCCGATTTTGAGTCAACCCCCCTTTGAGCCGAAACTTTGTTGGCACAGGGTTGACTC 360
AGGGGTTGACTCAACGCGAATGGCCTCTGGAAGGGCGTTGAGCCGACCCTCCCTCGTG 420
GCCGACCCCGCTCCACTATGAGCAGGGGGAAAGTTACGGGAAAAGTCCCCAAGTCCC 480
CCTTGACAAAAGATGACAATCGAGTTAATGTACAGCGATGCGTCACTCACCTCTGGCTG 540
GGCTACCCAGATGCGTGCGGAACGTTTCAGAGCCTCCTTCGATTCTTGCCAGGGAGG 600
GGCGCTACCCACTGGTGTAGAGCTCGCCAAGGTGCTGGGGCGCAGCCGCACGCCACGT 660
GGGCCATGCTCAGGGCTTTGACCCGTATGAGTCTGGAACGGCACGAGGGGCTATG 720
TTCTGACCCCTGCGGGCGTAGAACTTGCCAGGACCTGGGAACCACCGTGTCGGTGGGG 780
ATGAGGAGGTACAGACGGCGTTACAGCTGCTAGGAGTCGGTCATGCCGCCGAGGACAGGC 840
GCTGAAGCTTTTGAGCCGGGGCCCTACCCAAGGCCACCCGGCTCCTCTCCCCTGGGAT 900
CCCAAATGGATCCCTCAGCGCATTATCCTCTGGCGGTCTATAGCGCAAGGAGGTAGT 960
GGTGACGAAACACACAAATGTTTCACCCACCTTTTGATGCCGTAGAGGAGCTCGCTCG 1020
CCAGATTGCTGAAACCGCTAACAAGGCTTATTCAGCCATTTAGGCAGATTGTCAAAGT 1080
CCTGCCGCTGAGGTTCCCGACCTCTACGCCTGGCTGGCCGCCCTGGATGACTCCGCCAT 1140
CGAGGAGCTTGCCAGCGCTGAGGGAGGTCGAGGGAAGCCCCGCCCTTTACCCGC 1200
CGCCCTCAAAAGGCCCTGGCCATCGCCCTACAGCGCGGACCCTCGCCGAGATGCCCC 1260
CACGTTCCGCAACGCGCTCCGCTGGGCGATGGAACGGCAAGGGGTGAGCATCCGCAAGCT 1320
TGCGAGAGAGGTAGGGGTGAGCAAAACCACTGTTAAAAAGTGGCGTGGAGGCCGCTTGT 1380
CCCTCGTTCACGGACCTACGTGAGGAGGTTGAGGAGATCCTGGACCTCCCGGAAGGCGC 1440
CCTTTGCGGACGACTACCCCGCTGGGGGTTGCCAAAAATATTGGAAGGTGTTGAGGGAA 1500
AGATGCCCTTATCCCGGTTACGCGGACCTTCTGCGCTGGCCGCCCTGGCGCGCTA 1560
CGGCCGCCCGTGGGATGATCTCTCTCCGACGAACAGGAGGCCCTTCGGCGGAGGACGA 1620
AGACCGGTGGACCCGCTCTCAACCGCCAGAAGCGAGTGCGAAAGGCCAGTCAAAAACC 1680
TTTTCGGCTTTCTTTGACGAGTGGCCAACTGAGGCTCGAAAGAATGGGAGGACTACGA 1740
GCGCTATGCCTCATCGGCACCTGGGAGCATCGCGCGCTGCAGGCGGCGCTTGGCGGCGC 1800
ACCTCTCGCTCCACGACCGTGCGGACGGAACGCTCGAGCGTGAGCGGATACTTATAGA 1860



FIG. 7B

1861 ACTGTTCTACGGCTACTGTGTAACGAACGGGGCTCGACAGCAACGCGTTGAGCCTCGC
1920
1921 CCTCCTCACAGACCTGGAGCTCGTCCAATCGTACCTGGAGTGGCGCGTGAATAGGTACAA
1980
1981 GGACGAGGATTTACCCCCGTTACTCGATCGGAATACATGTTTATCGCCCTGGTGAAAAA
2040
2041 ACTCCACAGAGGTTATCTCCGCGCCCTTGGGCTTGGGGTAGACCCGGACGGGGTGAAGA
2100
2101 GCTGGAACGGAACGAAAATCGCCGGAATTGATGTACGGACGGCTACCACGCGGTGGA
2160
2161 GCCCTCCTGGAACTCACGAGCCCTCCGCTGGGTGCTGGATGGCATCCGGCTCATGCT
2220
2221 CCGCGATGCGGCGGGGCGGGTAGGCAACCTGCTGACACCCAAATCCCACCGCCAAAAG
2280
2281 CGAAGCGGGCGAAGCGTTCCGCTCTACCGGACGTCGTTCTGCTTTGGATGATGGTGGG
2340
2341 CCACCCCTCCGGGCGAAGCATTACTACGAAGCTCGCTTGGACATGAGCCAGTTCCAAGA
2400
2401 CGGGGATTTGCTCCCGGGCGGGACACGTGGGGCGGGCGGGCGAGGGTACTACCTGGC
2460
2461 CTACCGCAAAGTGGAGTTCAAAAACGCCCGAGGCCAGGTCTTTCAGAGCCTCCAGGACCA
2520
2521 CGATCTCGTCACGTTCCCTGGACGACCCGAGCACCTGTCTGCTGCTGGACGTGAA
2580
2581 CGGGATGCGGTACTCCCTCAACGAGCTCTTTCACGTCTACCTGCGCACGATCTCTCCCG
2640
2641 CCTGGCCAGGCTGGGCGGACCGGTCCCTCCTGCCCTGTTTCCGGGTGCCGATACG
2700
2701 AGGCTCAGACTTGGCACATCGTTGCGAGGCGCGCCGCTACGTGGCCGCGTGGCCGGG
2760
2761 GTACCCAGAACTTTTGCCCTTCGGCCCCCACTCCATCCGCCACGTGGTGGCCACGGAG
2820
2821 GTCGTGAAGCGCACGGGCTCTTTGAGGCGCGCCCAACGTGCTCCTGGATAGCATAGAC
2880
2881 ATGGTCGTTGACATTACGCCGTTGTTCCCGGACCGTAACAGTCACGGTTGGCGGG
2940
2941 CTAACGCCCGCGCCGGGGAGGTGAGCGGTGAGGGACCTCCACGACTTTTCTGCCCCG
3000
3001 GGTGGACGAACTGGTGCCGAACTCCTACCGGGGCGCGCGGGTGGGCGACGAGTGGCG
3060
3061 GCGGGGCTCGGTCCAGGGCGAGCGGGGCGACAGCTGGCCGTGGACCGGGGAAGGGCTT
3120
3121 CTGGATCGACCACAACCCCTCGGCCCCGAGCCCCGGCAGGGAACCTCTCACGCTGAT
3180
3181 CCAGGCGGCCAAGGGGCTCTCCCCGAGGAGGCCCGGCGCTGGGCCCAGCAGTGGCTTG
3240
3241 CCTCTCCCTTCGCCAAAGGTCAGGCGGACGAGGAGCTCAGGACCAAAGGCTTGAGTAC
3300
3301 TCAAGTGGTGGGAGCTCGGGTGCTCCAGTCCCTGAGTCTTCAGGTTCCAGGTACCTGA
3360
3361 GGAGTCGGACCCCTTTGACAACCCCGCTTCGGGACCTCCTACCCCCAGGGGCGAGGA
3420
3421 CGAGGCCCCCTTGGCCCCGGCTCCGAGGAGGTGCTGCGGCGCATGGTGTCTAGGCTTCT
3480
3481 CCGCACCCCGAGGCCGTGGCTACCTGAAGGGGCGCGGTCTGGATGCCGGGTGGTCCG
3540
3541 CCGCTTCTACCTCGGCTGGACGACACCGCGGGCCACCGCCGCTGCTACCCGGT
3600
3601 GATAGGGCCGGACGGCTCCCCGTTGCGCGCCACCTCTACTACGAGATCCCGGGCTCAC
3660
3661 CCAGGGCGCCCGGGCAAGGGCTGGGGGAGGGGAGGCCACCACTACTGGGCGCTCC



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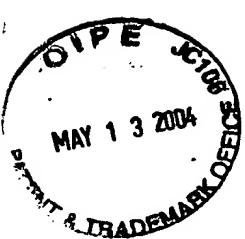
FIG. 7C

3721	CCCCCTTCGAGGGCCCCCTCCCCCGCCGCAAGCTCTTCTTGTGCGAGGGGGCGAAGGATGC	3780
3781	CTGGGCCCTCTGGCTCCACCTCCACGCCAGCCCTGGGCCAGGACCTGGCGGTGGTGAC	3840
3841	CTCCACGCACGGCTCCGCCCTCCCCGAGGCTGGAAGACCCCTGTTCTGGGCCCTTG	3900
3901	GGAGGAGGTCTACCTGGGCCAGGACGCCGACTCCGCCGGCGAGGAGATGGCCCGGAAGGT	3960
3961	GGCGGAGGTGGCGAGGCGGCCGTCCGCCGCGTCCGGTCCCGAGGGGATGGGAAGGA	4020
4021	CTGGACGGACTACTTCTGGCGGGGGCACCCCGAGGGCTTGGCCTCTCTTGGAGGG	4080
4081	AGCGGAGGTCTGGGAAGAAGAAGTGCTGGAGGTGGGGCCAGGATCCAGCTCCCGACCC	4140
4141	CGTGGACATCCAGCGGGCTTCGTGCGGGGCCACCTCTACGTCCCGTGGGGTCTTGG	4200
4201	GAACCGGGGGGAAGAAGGGGCCGCTACCGACCGTGGTGGTCCGCTCCGACGGGGCCGT	4260
4261	CCTGGGCTGGGGCTACTTGGCGGCCCGCCCGGACCCCTTGGAGGACGGGTGCTGGC	4320
4321	CGTGGACGACGGCACCATCATCCGAGGCCCGGAGGGCGCCGGGACCTCGTGGAA	4380
4381	CGGGGAGGCCATCAACCGCTTCTGGAAGCCCGGGCCGGGGAGTGAGCGCATGACCGT	4440
4441	GGCCCCCGGGACCTGCCTGGGCTCATCGTCCGCCACCTCCGCCAGGTGATCTCCCCAG	4500
4501	TGAGGACGGCTACCTCTGGCGCCTTAGGGGTGATGACCTCTACGTGCAGAGCGTCTT	4560
4561	CGACGCCGTGCCCTCTTCTCGTGGTGGGCCCGCCGGGCTCGGGGAAGACGGAGTTGCG	4620
4621	CCGCCCTCATGGCCGAGCTGGGGCCAAACGGCGTGGTGATCACCGGCCAGACCTCCGCCG	4680
4681	CACCGCCGCCCGGATCATCGACGAGACGGGGGGCTGGTGGCTTCGACGACCTGGAGGA	4740
4741	GGTGGCCAGCGGTGGGGAGCGCTGAGGCCTCCAGCTGGAGCAGTTCTCAAGGTGTC	4800
4801	CTACAAGAAGGAGACCGGCTCAAGAGCTGGACGGACCAAGGGGATGCGGTCTCAC	4860
4861	CCTCAACTTCTTGGGGTCAAGGTGATCACCACACCCAGGGGACGGGGACATCTGGG	4920
4921	GAGCCGGATGCTGGTATCCGCACCGCCGCTCCGGGACCTGGGAGAGGGGAGGAGCG	4980
4981	CCGCCCGGAGGGCTCTCCCCCAGGCCCTCAAGAACTCCGGGACAACCTCTACATCT	5040
5041	GGGCCATGGAGAACGCGGCCAGCCTCCACGCCCTGTACCGGAGCGCTTCGGGGCAAGG	5100
5101	GGGAGCGCTGGACGAGATCGCCGCCCTTGGTACCATCGCCACCACTGGGGGACG	5160
5161	AGGAGCTGGCGGCCCGCTGGAGGACGCCCTGCGCCGGCAGGAAGGGCGCTGGAGGAGA	5220
5221	CCCTTTCCGATGCCGAGGTGGTGGAGACGCCCTCAAGGAGGCCATCCGCCAGGGCTACC	5280
5281	GGAGCCACGTGGCCTGGTCCACGTGATCTCCAGGCCCGGAAGATCTTCGGGACGACT	5340
5341	GGGGCCGGGAGCGACCGTGGACATCCCCGGTGGCGGGACCCCAAGTGGGTGGGGCAGA	5400
5401	TCGCCAGCAACTACGGCTGGCGGGCCCCAGAAAGGCCGCTGAGGCCCGGCTTTGGGACA	5460
5461	AGCAGTTCGCATCATGCGCTGGAGGCCACCTTCGTGGAGCGGTGGTCAAGGGCTTCC	5520
5521	TCCAGGAGGGGATCCCTTGGAGCCCTGAAGCAACCCCTGGCTTCTGCTGGACACCC	5580



FIG. 7D

5581	CTGCCCGAGTCCGCTACCTGCACTGGTGGACCTCCGGCTGACAAGGAAAAGTGGCT	5640
5641	GGAGCGCTACGGGGAGGCCAAGCTGGCCAGAAAAGCGGGAGCTGGAGGAGGATTTT	5700
5701	GGCCCTGGTGGGGCCCCAAGATGGCCTTGCCCTCCAGGCTCCGCCGAGGAGGAGGAGA	5760
5761	CCGAGGTAAGCACCCAAGTACCCAAGTACCCAAGACCCTAAAGCCTCAGGTACCGGAGGA	5820
5821	CCTCGGGGACGGAGGACCTAAACCCCAAGGGCGTAAAGACTGAGGTGAGAGGGATGAT	5880
5881	CGTGGCTGTCAACGGCTTCAAGGGAGGGGTGGGAAGACCACACGGCGGTCCACCTGGC	5940
5941	CTGCTTCTGGCCGAGCGGGGCCCCACCTGCTGGTGGACGGGGACCCAACCGCTCCGC	6000
6001	CACGGGGTGGCACCGGAGGGGAGGCTCCCGGTGACCGTGGTGGACGAGCGGGTGGCGGC	6060
6061	CCGGTACGCCCGGGAGCACGCCACGTGGTGCATAGACACCAGGCCCGCCCCACGGAAGA	6120
6121	GGACCTCCGGGCCCTCGCCAAGGGGGTGGACCTGCTGGTCTGCCCACGTCCCCGACGC	6180
6181	CCTGGCCCTGGAGGCCCTCCTGGCCACCCTGGAAGCCCTGCGGGGGCGGAGGCCCGCTT	6240
6241	CCGGGTCTCCTGACCATGGTGGCCCCCGCCCGAGCCGGGACGGGAGGAGGCCCGGGC	6300
6301	CCTCTTGGGGGCGGAGGGCGTTCCCTCTTACAGGCTGGGTGAGGCGGGCGGACGCTT	6360
6361	CCCCAAGGCCGCCCTCCTGGGGGTGCTGTCTACCGGTGCCCGACCCAGGGCGAGGCT	6420
6421	GGCCTGGGGGACTACGCGCGGGTGGGGAAGAGCTCCTGAAGGAGGTGGGGGATGAGC	6480
6481	AAGTTCGCCAGGCTCCTCAAAGAGGTCAAGGAGAAGGAGGAGGCTCCGGGGAGCGGCT	6540
6541	CGGGGAAGAGCCGGCGGGAGGACTACGTGGCCATGAAGGTCTACATCAGCAAAGAGCTT	6600
6601	CACCGGAGGCTGAAGCTGAAGGCCCTGGAGGAGGAGAAGGAGCTTTCGGAGCTGGTGGAA	6660
6661	GAGGCCCTGAGGAAGTTGCTGGTGTGACCTCCTCCCGCTCGTAGAGCGTAAAAGGAGG	6720
6721	TAAGACGATGGTCACCTTAACAAATCGCCCTAGAAGCCCTTACGCGGGCACTCCCC	6780
6781	CCAGGAGCGGGCGTCTCTTGAAGCGCCTGGTCCGCAAGATATTGAAGGAACTCCACC	6840
6841	CCATCTGGAGCCAAGAGTTCGTGGATGTCGTCCCTTGGTCCGAGCACGCCACCCGCAAGG	6900
6901	GGCTCAGGGCCACGGACATCGGCGTGGACCTGGTGGGTACGGGAAGGACGACAAGGTCT	6960
6961	ACGCCATCCAGGTCAAGCTGTGGGATAAGCCCTCTCTTGAAGGACCTGGGGAGCTTCG	7020
7021	TGGGGTGGTGAACCACCCGAGTACGGCTTCGACCACGGGCTCATCGTGGCCCCAAGAG	7080
7081	GCCTGACCCAGGAGGCCGACCGCCAGCTCCAGGGCCTACCATCACCATCCTGAGCGAAG	7140
7141	AGGCTCTCTAGAAGACCTGGACCTGGAATCCCTCGTTCCAGACCGCCCCGAGGAAGCCC	7200
7201	GCAGGCGGGGAAGAAGGCCCTCCGTAAGTACCAGCAAGAAGCCTTAGAGGAGGTGGCCA	7260
7261	AAGCCTTCTTAGAGAAGGGCTGCCCCGGGGCAAGCTCATCATGCCCCGGGCACGGGCA	7320
7321	AGACCCTGGTGGCCCTCAAGATCGCCGAAAAGGTGGCGGGCCCCGGGGGAGGGTCTCT	7380
7381	TCCTGGCGCCCTCCATCGCCCTCCTGGACAGTCCCTCAGGGCTGGGCGGCGGAGGCTT	7440



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FIG. 7E

7441	CCTTGGCCCTTGGCCCTCTTCGCGGTGGTCTCGGACACGGGCGTGGGCAAGACCTCGGAGG	7500
7501	ACGACCTCTCCGCCCTCTCCCTCTCTCCATCCCTCTACCACCAAGCCTGAGGAGCTGG	7560
7561	CCTCCGAGGCCAAGACGGAGAGTCAGGAGGCCCTACCGTGGTCTTCTCCACCTACCACT	7620
7621	CGGCGGAGGTCTGGAGAGGGCCAGAAGGAGCACGGGCTTCCCCCTTTTGACCTGATGA	7680
7681	TCCTGGACGAAGCCACCGCACAGCCACGGTGGGGCGGGAGAAGAAAGCCCCCTTCACCA	7740
7741	AGGTGCACCACGACCACTACGTGAAGGCCCGCCACCGCCTCTACATGACGGCCACGCCCA	7800
7801	GGATCTGGGAGGTGGAGGGGAATGGAGAGAGGGGCCAAGGGAAAAAGGCGGGAAAAAGA	7860
7861	AGGACCCTCAGAAAGAGGGTTCTCTCCCTTTTGACCTCGGTGCCCTCTCTACGGAGG	7920
7921	ACTCCACGGCCCCGAAGGGGTGGAATCCTGGTCTACTCCATGGACAACGAGGGGATCT	7980
7981	ATGGCCCCACCCTCTACGAGTACACCTTCAACCGCGCCGTGAAGGAGGGCCACCTGAGCG	8040
8041	ACTACAAGGTATCGTCTTCTCCGTGGCGGAGGAAGCCAAAAGACCTGGCCTCTTACC	8100
8101	TCCAGGACCCGAGGCCCTCAAGGTGGAGGAGGCTCTGAAGGCCCTGGGCTGTGGAAGG	8160
8161	TCCTCCAGGGGAGGTGCGGGACGAGGAGGGGAACCCGATGGGGGGCCTCGACCTGCGGA	8220
8221	GAGTCATCGCCTTCCACGGCCGGGTGAAGGAGTCCAAGGAGATGGAGGAAGAGTTCACGA	8280
8281	AGGTGGCCCTCGCTGCCCAGCAGGCTGGCCTCCTTCCGAGGAGCTCCGGCGGGTGGAGG	8340
8341	TGAAGCACATAGACGGGCAGATGTCCGCCTATGACCGGAAGCGCCTCCTGGACTGGCTTA	8400
8401	GGGAGAACGTCCCCGAGGGGAGGTCCGCCTCCTCACCACGCCAAGGTCTCACCAGG	8460
8461	GGATCGACGTCCCGGCCCTAGATGCCGTGGCCTTCATGCGTCCCCGGGACAGCGTGGTGG	8520
8521	ACGTGATCCAGGCCGTGGGGCGGGCCATGCCAAGGCCCGGGCAAGGAGTACGGGTACG	8580
8581	TGGTCTGCCCGTGGTGGTGGGGGCGAGGACGAGGAGCGGGAGATCGAGGAGAGCGGCT	8640
8641	ACCGGGCGGTGTGGCAGGTGCTCTCGGCCTTGGCTCGGTGGACAAGTCTTCGAGGCCC	8700
8701	GCATGCGGGCCGCCCTGGTGGCCTCTCGGGTAAGGGCGAGGGCGGGGAAGGTGGAGAGG	8760
8761	CCCGAGAGGGTGTGGCCGTATCGGGGAAGGAAGCGCCTCCCCCGTGATCGTAGATGCC	8820
8821	TTCAGGGGAACCTCAACCTCCACCAGGAGATACCCGGAGCCTCGCCGGCAAGCTGGTCA	8880
8881	GGCGCCTCGCCCTGGGGCGGAAGTACCTGGAGAATGGGCCACGACGTGGCCCCGGGTGG	8940
8941	CGAAGGTGCTGGAGCAGCAGGTCAAGGCGATGGCGGAGCGGGACCCCAAGGTGAAGGAAA	9000
9001	AACTGGGGAACCTCCTCGCCGCCCTGCAGGCCCTTACCAGCGAGAGCGTGACGGAGGACG	9060
9061	AAGCCATCCTCATGCTGGTCCAGCACGCTCTACCAAGCCCATCTTCGACGCCCTCTTCG	9120
9121	GGGAACTCCTAGAAAAGCGGGAGGACCCGTTTCCGGGCCCTAGACGAACCTTCCAGG	9180
9181	AGTTCAGGGGGTCTCTGGACCGGAAGGGGAGGCCCTCAAGGATTTCTACGAAGAGATGC	9240
9241	GCCTCAAGGCCCTAGGGCTCACGGACGAAGCCGAAAGGGCCGACTTCTACGGAGGCTCT	9300



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FIG. 7F

ACTCCAACCTTCTCGCCCGGGCCTTCCCCAGGTG6CCGACCAGGTGGGGATCGCTACA
9301 -----+-----+-----+-----+-----+ 9360
CCCCGGTGGAGCTGGTGGACTTCTGGTGAAGAGCGACAGAGCTGGCCAGGAAGCACT
9361 -----+-----+-----+-----+-----+ 9420
GTTGGCCGGGGCTCGATGGGAGAAAGTCTTCATCCTGGAGCCCTTCGCCGGCACAGGC
9421 -----+-----+-----+-----+-----+ 9480
ACCTTCGTCAACCGAATCCTGCACCGGTAGCCGAAAGGGCGGGGCCGACGCGGTCAAG
9481 -----+-----+-----+-----+-----+ 9540
GGCAAGCTGGAGCGGGGGAGATCTGGGCCAACGAGATCCTTCTCTCCCTACTACGTC
9541 -----+-----+-----+-----+-----+ 9600
CTCAGGGCCAACGTGGAGAACACCACCTGGCCCTGACCGGGAGTACGTCCCTTCAAG
9601 -----+-----+-----+-----+-----+ 9660
GGGGCGTTCTGGCGGACTCCTTCGGCTG6CGGAGCTGGGGTATAGCGAGAAAAAGTTTG
9661 -----+-----+-----+-----+-----+ 9720
CATCATCCCGCTCTTCCCGAAGAATACGGTGAGGCCCTGAACGAGCAGCTGAAGGCCCC
9721 -----+-----+-----+-----+-----+ 9780
TATCCAGGTTATCCTCTCAACCCCCGTCGGGCTTG6TTGGAGAAGGAGGGCGAGGGG
9781 -----+-----+-----+-----+-----+ 9840
AAGAAGAACCCGCTTACCGTAAGGTGCGGAGCGGGTGGAGCCAACCTATGTACGGCGG
9841 -----+-----+-----+-----+-----+ 9900
GCCAAGGAACCTCCCATCGGGGGGACAAAACCAAGGGAGAGAACCTGAACCTCCCTCTAC
9901 -----+-----+-----+-----+-----+ 9960
GACCAGTACATCCAGGCCTTGGGGTGGCGAGCGACCGTATCGGGAGGAGGGGGTCTGT
9961 -----+-----+-----+-----+-----+ 10020
GCCTTCGTCAACCAACAGGGTGGCTGGGGGGCGTAGTGGCCCGGGGCTTGGGGCTCT
10021 -----+-----+-----+-----+-----+ 10080
TTGGCGGAGGAGTTGCCGAGGTGTACGTCTACGACCTGAGGGGGATGCCAGGGAGAAG
10081 -----+-----+-----+-----+-----+ 10140
GGGGAGGCACGGAAGAAGGAGGGGGCGGGGCTTTGGACAGCCTTCCCGCGCGGGGTC
10141 -----+-----+-----+-----+-----+ 10200
TGCTCTCTCTCTG6TGAAGCGTAAGGACCACAAAGGGATCGGCAAGGTCCACCTCTAT
10201 -----+-----+-----+-----+-----+ 10260
CGGGTCGGGGACGGCTCTCCGGGAGGCCAAGCTGGCTCTGGTGAAGGAGCATGGCTCA
10261 -----+-----+-----+-----+-----+ 10320
GTCTCTGGGTTCCCTGGCAAGAGGTTCCCTATGAAGAGTGGGTGGGGAGGCTTACCCCG
10321 -----+-----+-----+-----+-----+ 10380
GGTTCTCGGGATGTTGTCCCTGGACGAGGTCTTTGAGGTGCGGAGTTCTGGGTGAAGA
10381 -----+-----+-----+-----+-----+ 10440
CCAACCGCGATGCCTACGTCTTCAACCCCTCCCGGGCGGAGCTGGAGCGGCACATGAGGC
10441 -----+-----+-----+-----+-----+ 10500
GGCTCATCTCCACCTACAACGAGCACGTGAAAAGGAAAAAGAGGGGAACTAGGGGAAC
10501 -----+-----+-----+-----+-----+ 10560
TGAAAAGGATGAGAGCATCATCAAGTGGGATAGGGAACCTACAGGTACCTAGAGTCCC
10561 -----+-----+-----+-----+-----+ 10620
TGAGGGAAGCTTCTACGAAGGAGCGGTCAAGTCTACGAGGCCCTTACCGCCCCCTCG
10621 -----+-----+-----+-----+-----+ 10680
TGCCTATGTACCTTACCTCAGCCGCACTTTCAATAGCATGATTTACCAAATCCCCGCA
10681 -----+-----+-----+-----+-----+ 10740
TCTGGCCCAACCCCGAGGCCGAGAACCTGGCCATCGCCGTGGCCGGAAGGGGAGTAACG
10741 -----+-----+-----+-----+-----+ 10800
CTTTAGCGCTGTGGCCACCAGGAGGGTGGTTGACCTGCACTTTATTGAGACCACCCAGC
10801 -----+-----+-----+-----+-----+ 10860
TCTACCCCTTTACCACTACCCGAAAACAGCCCTCTGGGGGACACCCAAAGCGCAAGC
10861 -----+-----+-----+-----+-----+ 10920
TCAACCTCAAGGAGGAGTTCTTGAGGAAGCTTGGGGAGGTCTCGGCCGCCCCGTTCCCC
10921 -----+-----+-----+-----+-----+ 10980
CCGAGGAGGCTTCGCTTACATCTACGCCGTGGTGAGCCACCCCTCTACGCCGAGCGCT
10981 -----+-----+-----+-----+-----+ 11040
TCGCCAAGGACCTCAAGATGGACCTCCCCGCGATTCCCTCCCCAAGATCCGAACTCT
11041 -----+-----+-----+-----+-----+ 11100
TTGCCAGGCTGGTGAAGGCGGGTCAAGAACTATTACCTCCACACCGAGTACGAGACCC
11101 -----+-----+-----+-----+-----+ 11160

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